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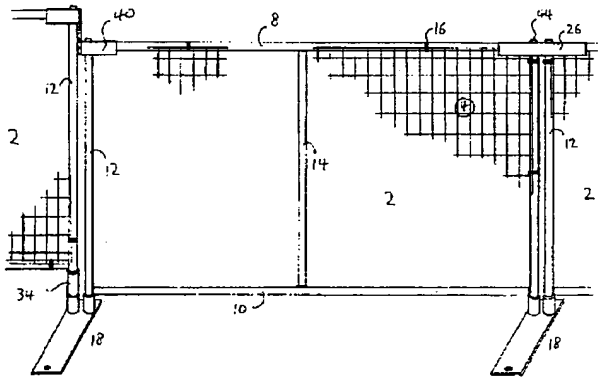
(54) CLOTURE TEMPORAIRE
(54) TEMPORARY FENCE

(57)

²²²A portable fencing system which is designed for temporary use, easy to ²assemble and²disassemble because of limited but versatile parts. Although light and ²extremely portable, has²excellent stability due to a unique and diverse self aligning cap connection ²system with strong²metal bases²



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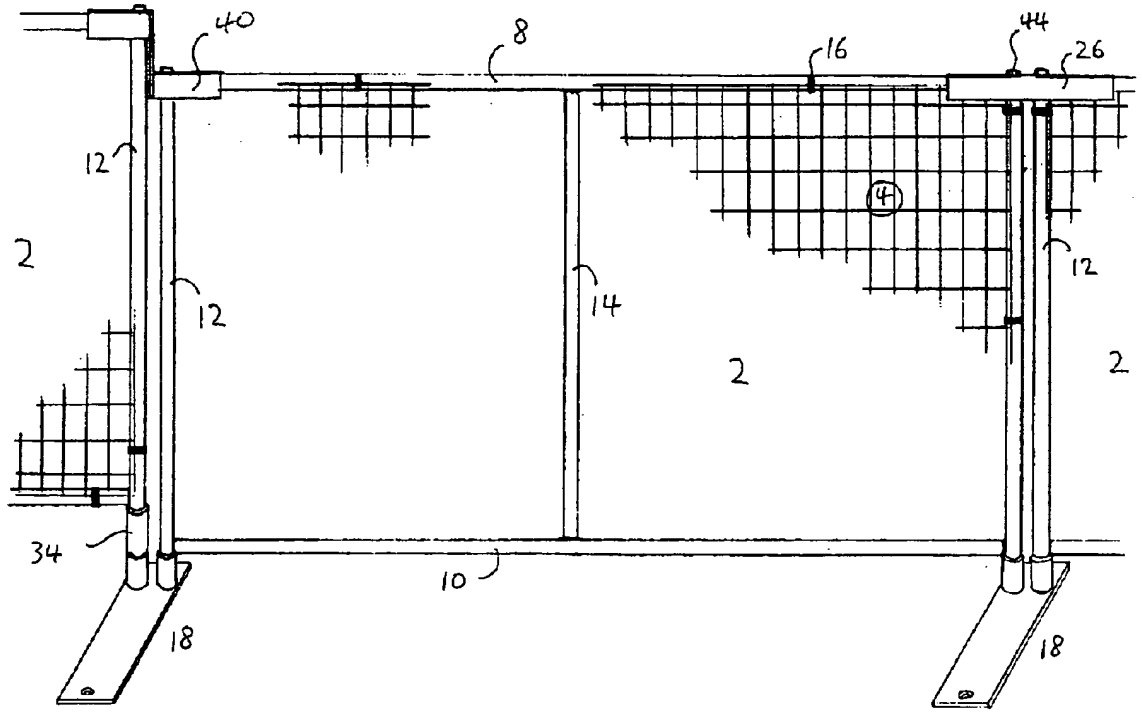



(57) Abrégé/Abstract:
A portable fencing system which is designed for temporary use, easy to assemble and disassemble because of limited but versatile parts. Although light and extremely portable, has excellent stability due to a unique and diverse self aligning cap connection system with strong metal bases

## ABSTRACT

**A portable fencing system which is designed for temporary use, easy to assemble and disassemble because of limited but versatile parts. Although light and extremely portable, has excellent stability due to a unique and diverse self aligning cap connection system with strong metal bases**

## BACKGROUND OF THE INVENTION

### 1. Field of the Invention

This invention relates in general to portable fence construction and in particular to a portable mesh fence capable of adapting to varied terrain due to unique connecting and stabilizing designs and with the capacity to be reconfigured with relative ease and versatility i.e.. further dividing walls or gate added, etc..

### 2. Prior Art

Temporary fencing systems are desirable to customize fencing needs in a quick and efficient manner so that the fenced in area could be set up in a variety of configuration to fit a multitude of applications. the resultant fenced in area could be used , for example, in indoor and outdoor compounds, at construction sites, animal kennels, seasonal display items, for garden centres, for outdoor special events, for crowd control, for repair and renovation area, for property fencing, for equipment compounds, etc..

Canadian Patent No. 2226541 filed February 13,1998 is an example of a known portable fence system comprising fence sections mounted in base blocks made in the form of a skin having a hollow chamber therein with filler material inserted into the chamber. Although this is an improvement of a previous known system that incorporated heavy and fragile concrete base blocks, a disadvantage with the base blocks of the known portable fencing system is lack of good alignment and lack of stability of fence sections because of lack of capping system and the base blocks i.e. need to find filler sand , water and heavy concrete, plastic shoe still susceptible to breakage.

Canadian Patent No. 2028253 filed October 22,1990 is an example of a portable fencing system although its intended use is permanent. Therefore not qualifying as a truly temporary fence. The disadvantage of this type of fence is that it is comprised of many pieces making transport and assembly complex, time consuming and permanent.

## SUMMARY OF THE INVENTION

An objective of this invention is to provide a temporary portable fencing system incorporating steel feet and caps with a bolt on connection system which maintains the integrity and strength of the structure above known fencing systems.

It is also the objective of the present invention to provide a temporary and portable fence structure in a lightweight form that can be transported to a location in small or large quantities.

Another objective of the present invention is to provide a temporary fence structure which can be assembled and disassembled quickly and with relative ease.

A further objective of the present invention is to provide a temporary fence that can be adapted to various topographical sites and still maintain strength of structure.

A still further objective of the present invention is to provide a temporary fence that can be modified more than once a day to suit compounds, gates, stalls, etc..

And yet another objective of the present invention is to provide a temporary fence that is aesthetically pleasing in appearance i.e.. well aligned, non rusting finish.

The present invention uses lightweight tubing and pliable steel mesh allowing for flexibility in installing fencing which aids in assembly without losing integral structure stability. It is easily assembled and disassembled by one person. The issue of security is addressed by torqued on bolts in the connecting self aligning capping system providing a pleasing aesthetic appearance. Limitless applications are possible with use of only a few interchangeable caps and bases which overcome diverse topography. Appearance of the fence is maintained by use of rust free materials such as galvanized tubing, galvanized mesh, galvanized straps, painted caps and bases. Any given base which is deemed not to have its intended full stability due to difficult topography may be anchored to different ground surfaces by pertinent surface anchors i.e.. rebar or wedge anchors or concrete screws.

**BRIEF DESCRIPTION OF THE DRAWINGS**

Figure 1. is a front elevation view of the temporary fence system showing two of the possible four connecting configurations.

Figure 2. is a perspective view of the portable fence system showing the two remaining connecting configurations.

Figure 3. shows a perspective view of a stabilizing base.

Figure 4. shows a perspective view of a step pin.

Figure 5. shows a perspective view of a self aligning cap.

Figure 5a. shows a perspective view of bolt.

Figure 6. shows a perspective view of a self aligning step cap.

Figure 7. shows a perspective view of a gate base.

Figure 8. shows a perspective view of a gate cap.

Figure 8a. shows perspective view of a gate bolt.

Figure 9. shows a perspective view of a corner cap.

**DETAILED DESCRIPTION**

The present invention relates to an improvements in portable fencing system which includes a plurality of fence sections. Referring to Figure 1, there is shown a plurality of portable fence sections 2 with the two out of four basic connecting configurations. Modular fence section 2 is comprised of an upper rail 8 which is welded flush to the top of the side posts 12 and a lower rail 10 welded four inches from the bottom of the said posts 12. In the middle of the fence section 2 there is a vertical support member 14 midway across the fence section. Additionally, there is fence section 6 as shown in Figure 2 half the length of the fence section 2 as shown in Figure 1. The vertical support member 14 is eliminated in the half fence section 6. The half section 6 can be utilized as needed to fill in shorter distances maintaining the integrity of the fencing system. The galvanized steel mesh 4 is secured to the said rails 8 ,10 and posts 12 by galvanized strapping 16 which is fastened under pneumatic pressure for security and strength.

The ends of each fence section 2 or 6 include rigid side posts 12 which extend below the lower rail 10 to form legs 13 with each leg 13 being inserted into a corresponding receiving pocket 24 in the stabilizing base 18 as shown in Figure 1,2 and 3 or gate base 50 as shown in Figure 2 and 7.

Figure 3 shows a stabilizing base comprised of a steel flat bar 20 supporting two receiving pockets 24 and a hole 22 for anchoring if necessary. With the use of a step pin 34 as shown in Fig 1 and 4, any stabilizing base 18 can be adapted to step up an adjacent section of fence 2 or 6 to accommodate changes of elevation in terrain. A step pin 34 consists of a male end 38 which is inserted into a receiving pocket 24 on any stabilizing base 18 and a female end 36 which receives the adjacent fence panel 2 or 6. The resulting elevation in the top of the adjacent fence section 2 or 6 is met by the use of a self aligning step cap 40 as shown in Figure 1 and 6. Each self aligning step cap 40 is comprised of a two equal sided formed channels 30 connected together by a length of flatcar 42 which keeps the fence sections 2 or 6 aligned. Each formed channel 30 has a bolt hole 32 that fits over the end of a fence section 2 or 6 directly over the nut 60 welded to the top of every vertical end post 12 as shown in Figures 1 and 2. A bolt 44 as shown in Figure 5a is then inserted through each bolt hole 32 and threaded into the nut 60 welded to the top of every vertical end post 12 as shown in Figures 1 and 2. and torqued to specifications.

Figure 5 shows a self aligning cap 26 the most widely used of the cap configurations. The self aligning cap has two legs 28 which align the adjacent fence panels 2 and 6 by firmly holding each panel between the two legs 28 . The self aligning cap 26 is secured to each adjacent panel 2 or 6 by inserting bolts 44 through the bolt holes 32 located in the web 30 and threaded into the nuts 60 welded to the top of every vertical end post 12 as shown in Figures 1 and 2. and torqued to specifications. A self aligning cap 26 is used in conjunction with a stabilizing base 18 .

Figure 7 shows a stabilizing gate base 50 similar in context to a stabilizing base 18 except for the alignment of the receiving pockets 24 . The receiving pockets 24 are aligned parallel to the sides of the flat bar 20 on a stabilizing gate base 50

thereby allowing one of the receiving pockets 24 to be at a right angle to the end of a fence section 2 or 6 instead of in alignment as in the case with a stabilizing base 18. The receiving pocket 24 which is left at a right angle to the last fence section 2 or 6 will now become the pivot point for the next

fence panel 2 or 6 to be utilized as a gate. The fence panel 2 or 6 that has been chosen as a gate is secured at its top with the use of a gate cap 52 as shown in Figure 8. The gate cap 52 comprises an equal sided formed channel 30 which fits over the last fence section 2 or 6 before the fence section 2 or 6 utilized as the gate. the formed channel 30 is held in place by two equal sided legs 28 and a bolt which is threaded through a bolt hole 32 in the web of the formed channel 30 and torqued into a nut 60 welded to the top of every vertical end post 12 as shown in Figure 1 and 2. A square flange 54 with a bolt hole 32 in its centre is welded at right angles to the bolt hole 32 in the web of the formed channel 30 which aligns directly over the corresponding receiving pocket 24 which is on the stabilizing gate base 50 . A bolt 46 which is similar to bolt 44, but with only a partially threaded shank is then inserted through the square flange 54 and threaded into the nut 60 welded to the top of every fence section 2 or 6 which is utilized as a gate . the unthreaded portion of the bolt 46 resting freely in the square flange 54 allows for easy opening and closing of gate section 2 or 6. The square flange 54 on the gate cap 52 acts as the top pivot point for the fence section 2 or 6 which is utilized as a gate. By having the pivot points for the fence panel 2 or 6 at right angles to the last fence section

2 or 6 , it allows the fence section 2 or 6 utilized as a gate to open 180 degrees. The stabilizing gate base 50 and gate cap 52 are used in conjunction with each other.

Figure 9 shows a corner cap 56 comprised of two legs 28 and a web 30 of equal width . there are two bolt holes 32 distal to one end of the corner cap 56. The corner cap 56 is used when a change in fence line direction is required. A bolt 44 is inserted through the proximal bolt hole 32 and threaded into a nut 60 welded to the top of every vertical end post 12 as shown in Figure 1 and 2. The distal bolt hole 32 does not have any legs 28 in its proximity to allow the next fence section 2 or 6 to assume a new desired direction 90 degrees in either direction from the last fence section 2 or 6. When the new direction has been decided a bolt 44 is threaded through the distal bolt hole 32 and torqued to specifications. A stabilizing base 18 is used in conjunction with this corner cap 56.

The panel 2 or 6 to be utilized as a gate would not have a base or cap configuration on its distal end as shown in Figure 2.

**CLAIMS**

1. In a temporary fencing system having a plurality of fence sections , plurality of stabilizing bases and plurality of connecting caps secured together by bolts,

2. A fence section as claimed in claim 1 comprising an upper horizontal member parallel to a lower horizontal member of the same length, both of which have their ends attached to vertical members of the same length, and an extension of said vertical members past the said lower horizontal member

and a single vertical member mid span between the said upper and lower horizontal members.

**3.** A fence section as claimed in claim 2 having a threaded nut attached to the top of each vertical member.

**4.** A fence section as claimed in claim 2 having a galvanized steel mesh attached to the perspective vertical and horizontal members by galvanized strapping secured by galvanized clips.

**5.** A fence section as claimed in claim 1 having bolts used in conjunction with connecting caps for the purpose of aligning and securing fence sections.

**6.** A fencing system as claimed in claim 1 having a stabilizing base wherein two equal length receiving pockets are attached to a heavy rectangular flat bar in a row spanning the width of the said flat bar for the purpose of receiving one end of two fence sections and a anchor hole at one end for the purpose of anchoring.

*7.* A fence system as claimed in claim 1 having a gate base wherein two equal length receiving pockets are attached to a heavy rectangular flat bar in a row aligned with the sides of the said flat bar for the purpose of receiving one end of two fence sections one of which is utilized as a gate and an anchor hole at one end for the purpose of anchoring.

**8.** A fencing system as claimed in claim 1 having a variety of connection caps for the purpose of aligning and securing fence sections together.

**9.** A fence system as claimed in claim 8 having a self aligning cap comprising an equal sided formed channel and having two bolt holes in the middle portion of the web.

**10.** A fence system as claimed in claim 8 having a corner cap comprising an equal sided formed channel with the web portion extended on one side a distance equal to the channel width, beyond a width consistent with the channel flange ends, and having two bolt holes proximal to the extended web end of the channel

**11.** A fence system as claimed in claim 8 having a gate cap comprising an equal sided formed channel with a bolt proximal to one end which is adjacent to an equal sided piece of flat bar with a bolt hole in the centre attached at a right angle to the formed channel.

**12.** A fence system as claimed in claim 8 having a step cap comprising an equal sided formed channel with a bolt hole proximal to one end, which is attached to a length of flat bar of the same width; and said flat bar is attached at the other end to an equal sided formed channel with a bolt hole proximal to the end attached to the flat bar used in conjunction with step pin.

**13.** A step pin as claimed in claim 12 having an extension insert wherein a section of tubing is attached to a piece of pipe creating a raised pocket when inserted on any stabilizing base.

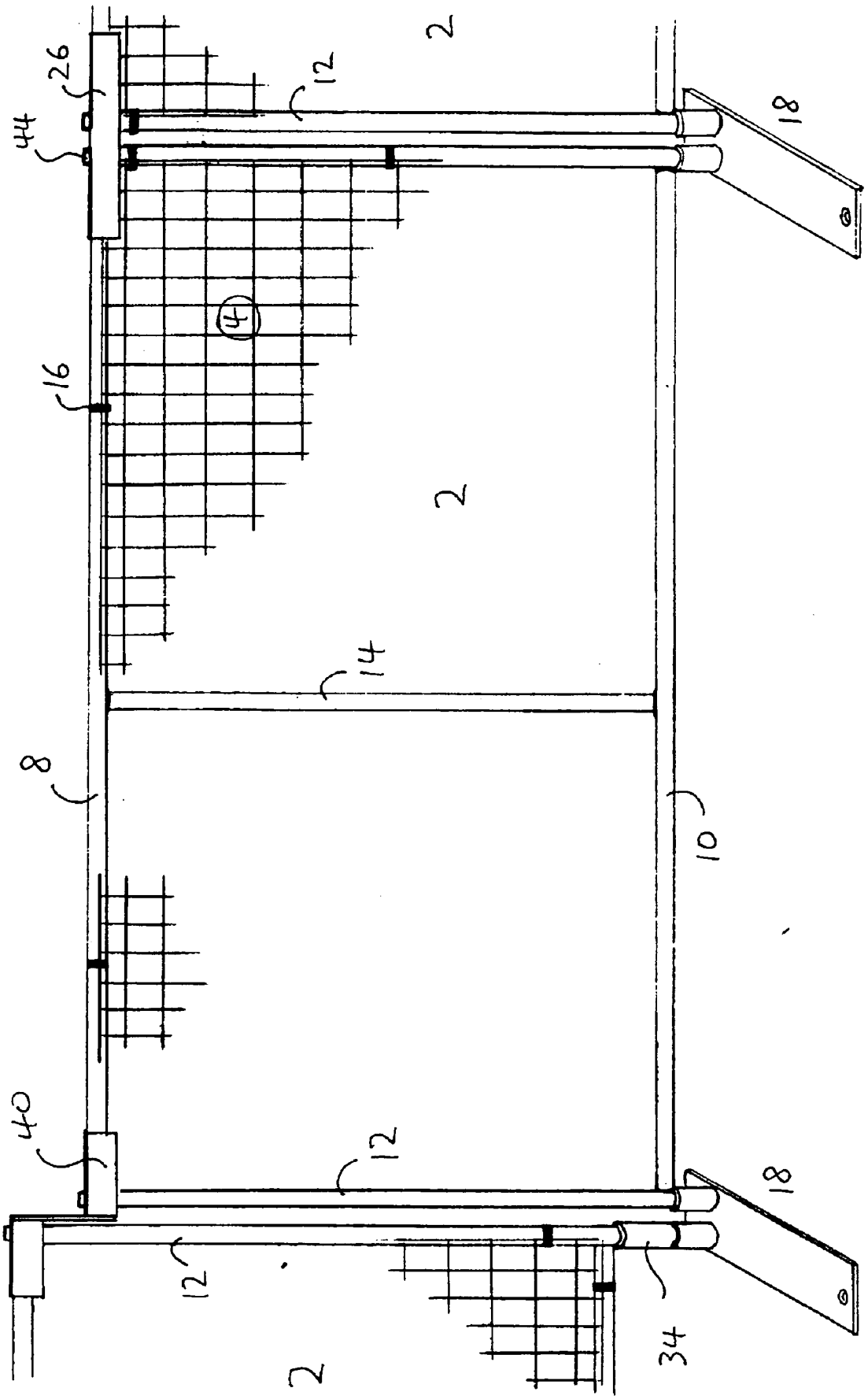



Fig. 1

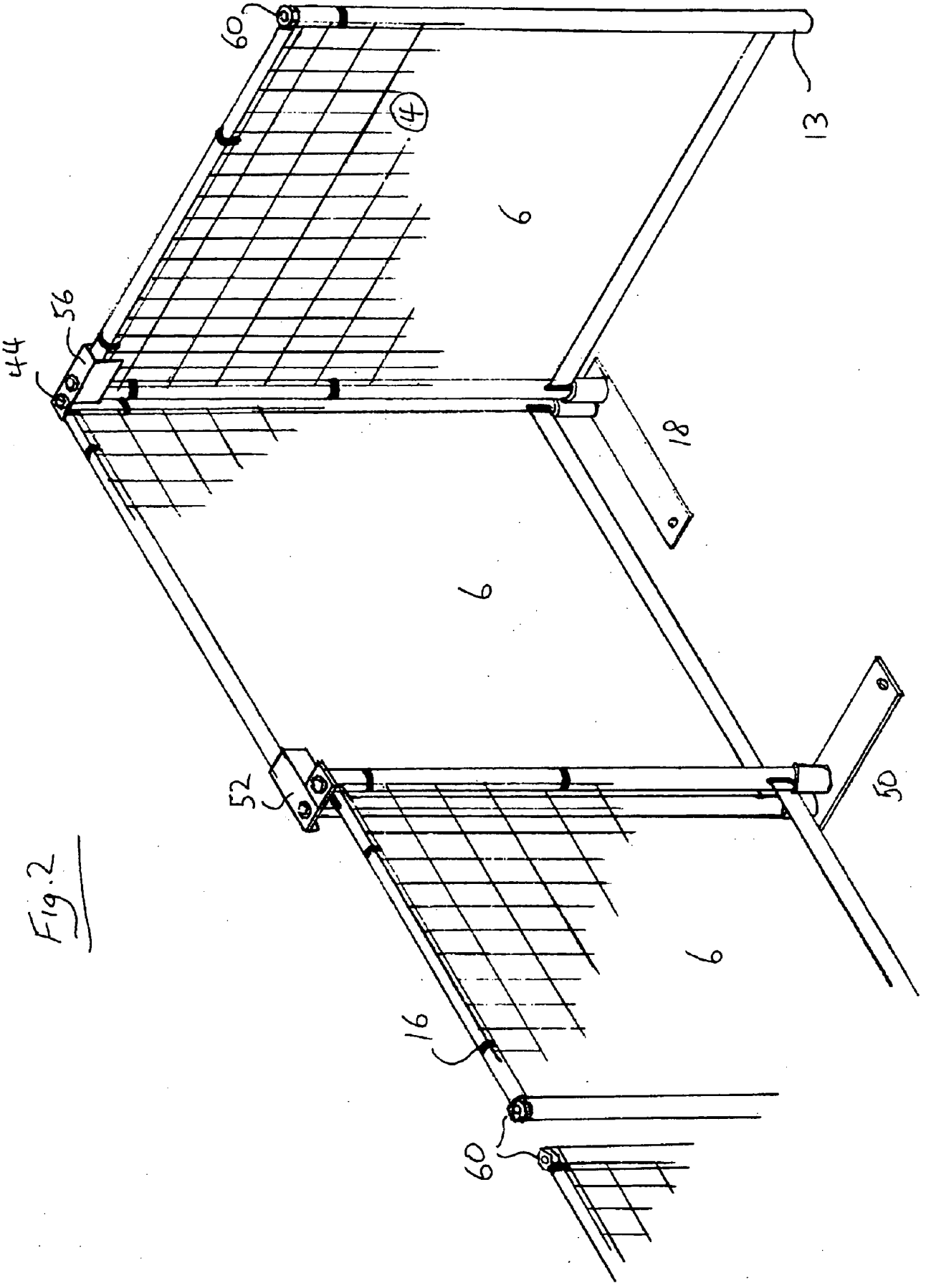
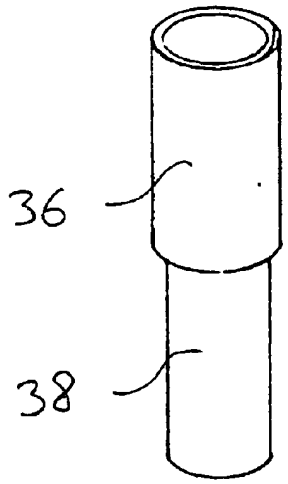



Fig. 2

Fig. 4



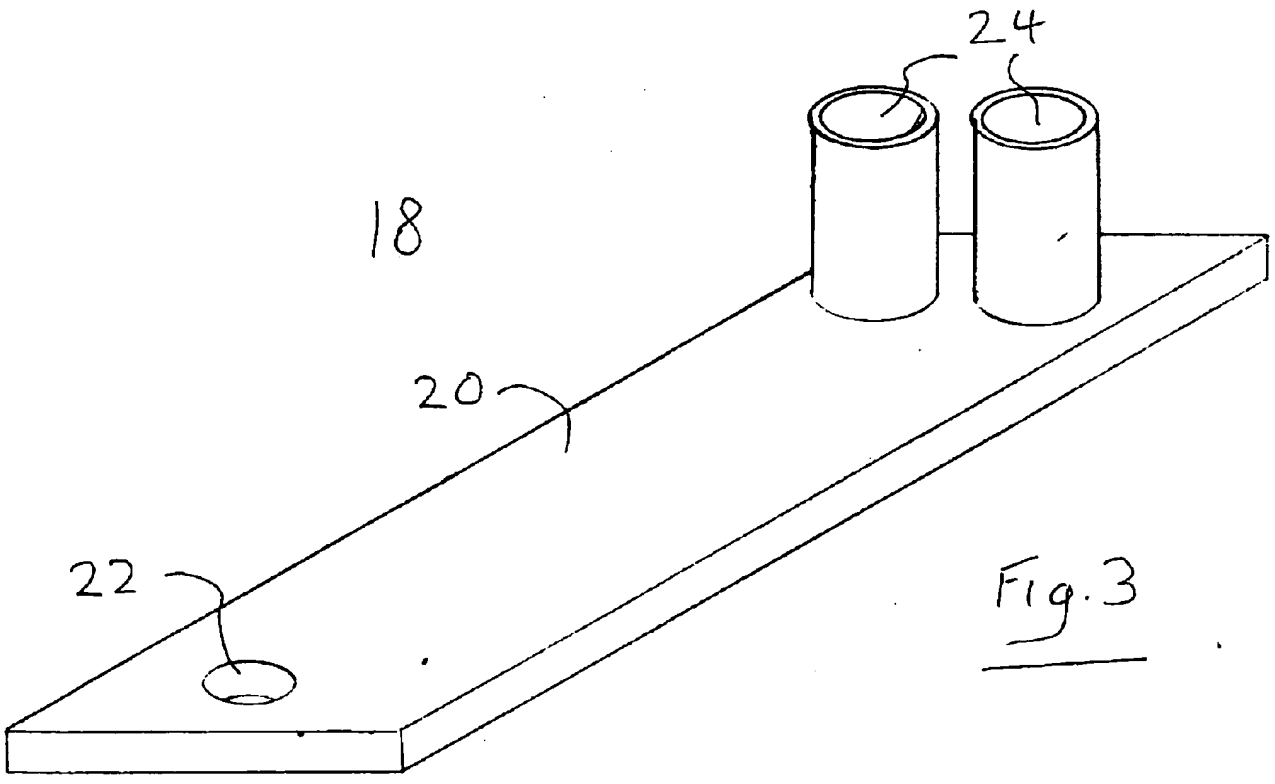




Fig. 3

Fig. 5a

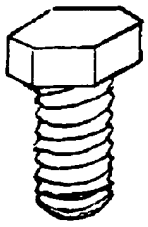
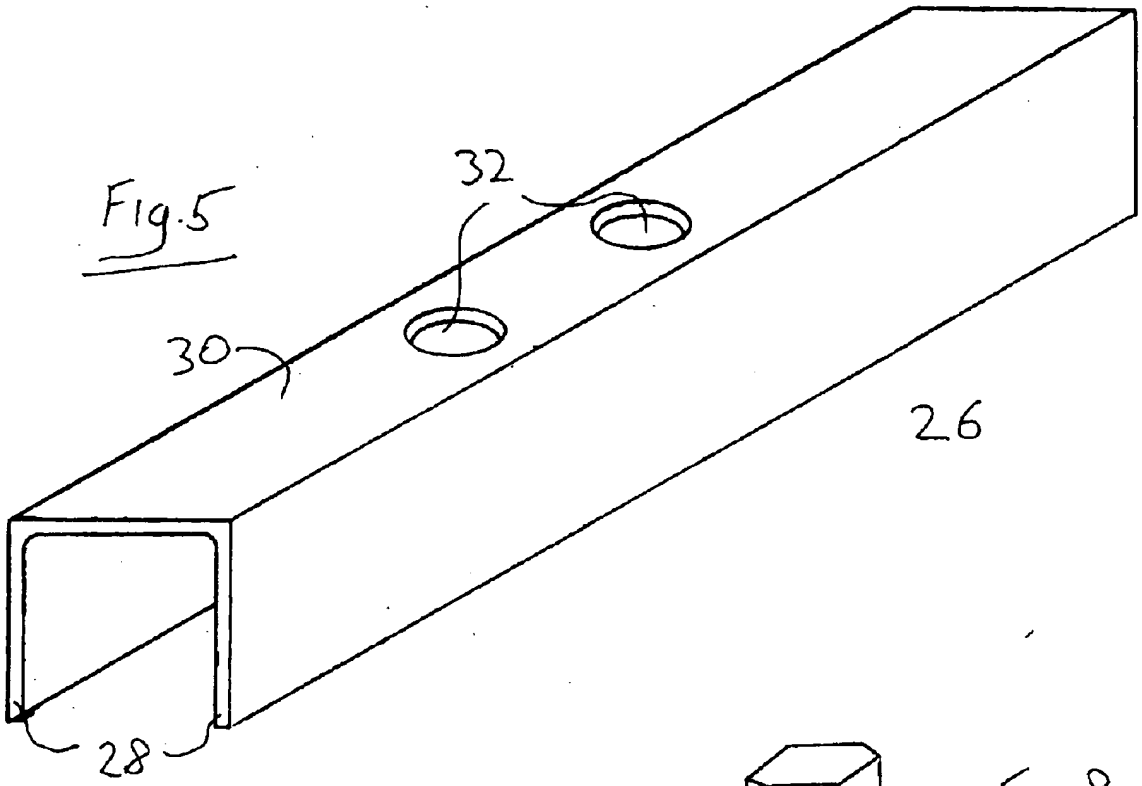



Fig. 5



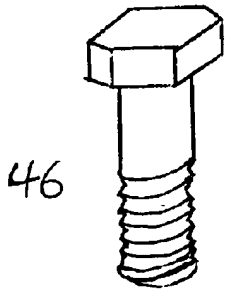




Fig. 8a

Fig. 6

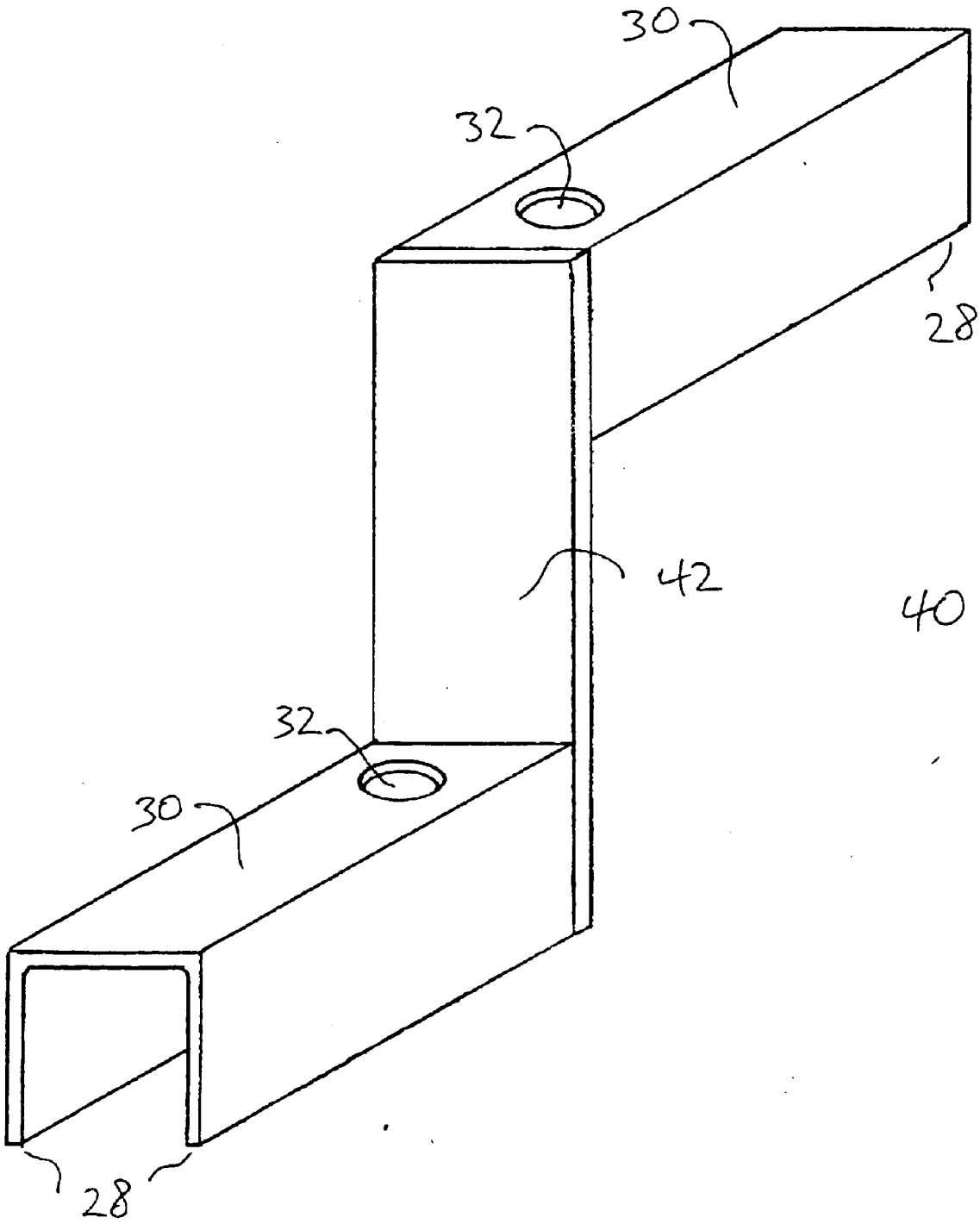


Fig. 7

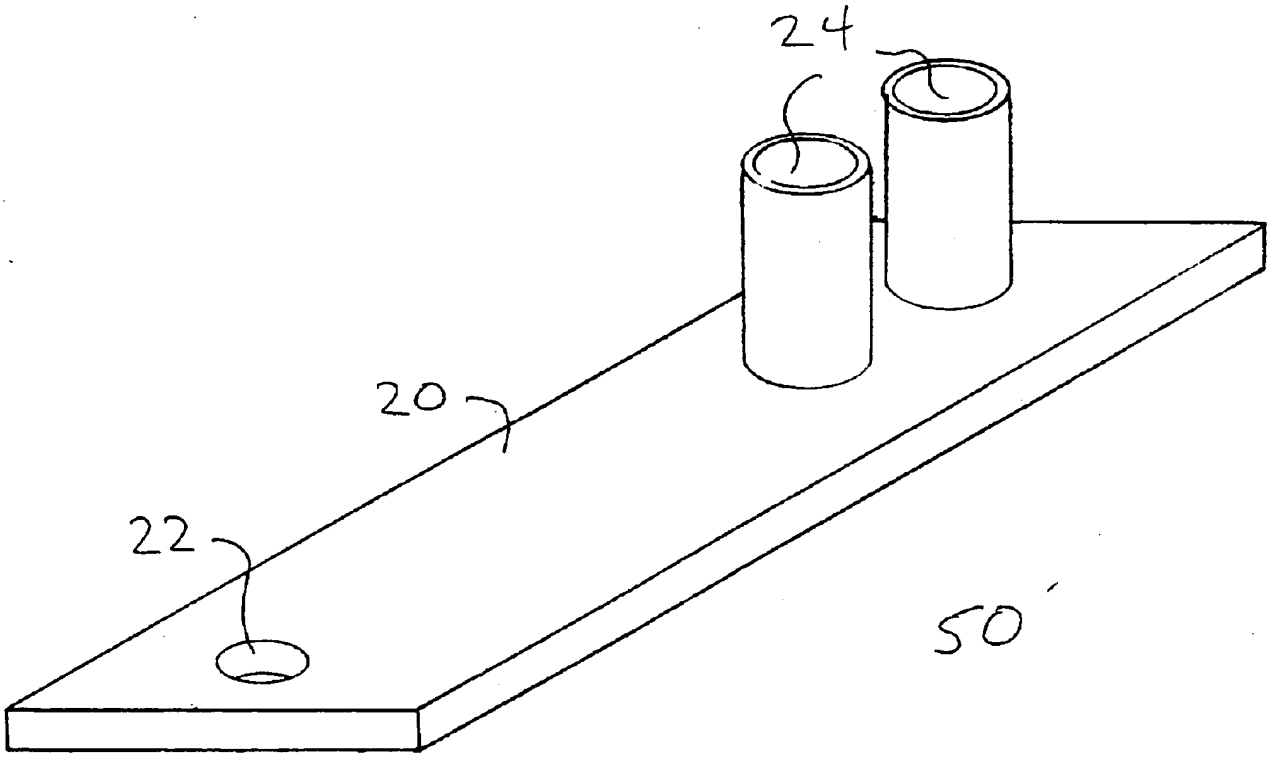


Fig. 9

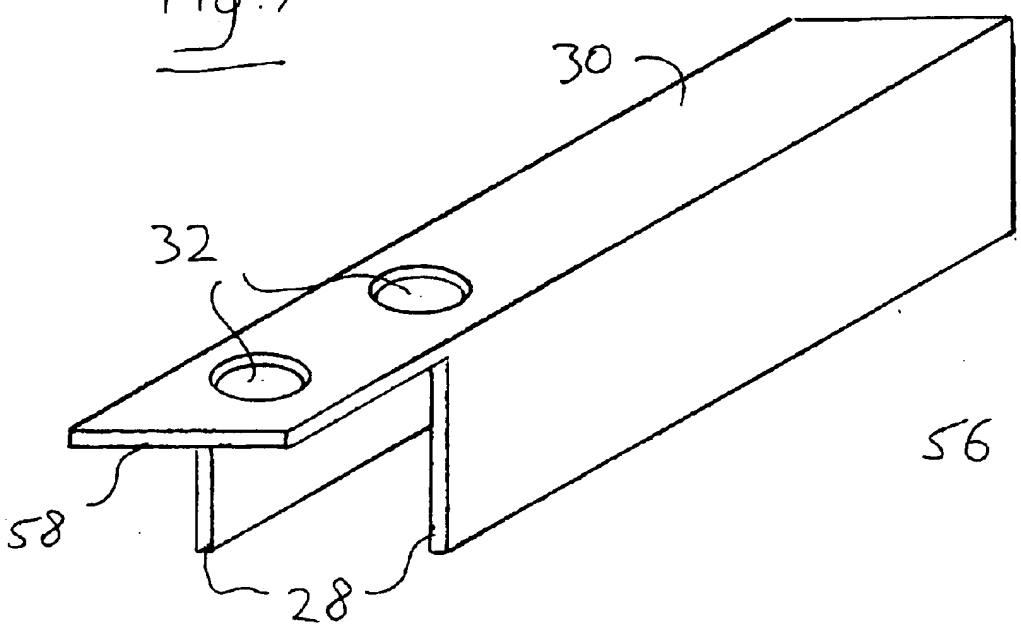



Fig. 8